

CM WHAT IS CLAIMED IS:

~~1.~~ A method of preparing polycarbonate by the melt process comprising the steps of:

a) melting a dihydric phenol and a diester of carbonic acid for a time and at a temperature sufficient to form a melt; and thereafter introducing a catalyst composition comprising a tetraorganophosphonium salt or a derivative thereof and

1) an alkali and/or alkali earth metal compound or derivative thereof or

2) a less active alkali and/or alkali earth metal derivative thereof

into the melt; and

b) oligomerizing the product from step a) to a number average molecular weight of from about 3000 to about 7500 ; and

c) polymerizing the product from step b) to a number average molecular weight of from about 16,000 to about 35,000.

~~2.~~ A method of preparing polycarbonate by the melt process comprising the steps of

a) melting a dihydric phenol and a diester of carbonic acid for a time and at a temperature sufficient to form a melt; and thereafter introducing a catalyst composition comprising from about 1.0×10^{-5} to about 5.0×10^{-4} moles/mol dihydric phenol of a tetraorganophosphonium salt or a derivative thereof and

1) from about 1.0×10^{-7} to about 1.0×10^{-6} moles/mole dihydric phenol of an alkali and/or alkali earth metal compound or derivative thereof or

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into the melt; and

c) polymerizing the product from step b) in a two stage polymerization system comprising two continuous polymerization reactors in series, the first polymerization reactor maintained at a temperature of from about 285 °C to about 315°C; the second polymerization reactor maintained at from about 280 °C to about 310 °C; wherein the product from the second polymerization reactor has a number average molecular weight of from about 16,000 to about 35,000.

4. The method of claim 1, wherein the dihydric phenol is BPA

6. The method of claim 2, wherein the dihydric phenol is BPA.

7. The method of claim 2, wherein the diester of carbonic acid is diphenyl carbonate.

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